

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU00/00599

A. CLASSIFICATION OF SUBJECT MATTER												
Int. Cl. ⁷ : A61K 38/41, 38/42, 38/17, 38/10, 39/40; A61P 31/04, 15/02												
According to International Patent Classification (IPC) or to both national classification and IPC												
B. FIELDS SEARCHED												
Minimum documentation searched (classification system followed by classification symbols) IPC: A61K 38/41, 38/42, 38/17, 38/10, 39/40; A61P 31/04, 15/02												
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched AU: IPC AS ABOVE												
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT: Iron, heme, porphyrin, gingipain, HagA, TonB, HA2, porphyromonas gingivalis STN, Files CA and Medline: Keywords as above.												
C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
P,X	Journal of Bacteriology, Vol. 181, No. 12, issued June 1999, Arthur A. DeCarlo et al. "Porphyrin-Mediated Binding to Hemoglobin by the HA2 Domain of Cysteine Proteinases (Gingipains) and Hemagglutinins from the Periodontal Pathogen Porphyromonas gingivalis", pages 3784-3791 Whole document	1-17										
P,A	The Journal of Biological Chemistry, Vol. 274, No. 25, issued 18 June 1999, Yixin Shi et al. "Genetic Analyses of Proteolysis, Hemoglobin Binding, and Hemagglutination of Porphyromonas gingivalis", pages 17955-17960 Whole document	1-17										
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input type="checkbox"/> See patent family annex												
<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E" earlier application or patent but published on or after the international filing date</td> <td>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	"P" document published prior to the international filing date but later than the priority date claimed	
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art											
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"P" document published prior to the international filing date but later than the priority date claimed												
Date of the actual completion of the international search 14 July 2000		Date of mailing of the international search report 31 JUL 2000										
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929		Authorized officer S. CHEW Telephone No : (02) 6283 2248										

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU00/00599

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	The Journal of Biological Chemistry, Vol. 273, No. 33, issued 14 August 1998, Kuniaki Okamoto et al. "Involvement of a Lysine-specific Cysteine Proteinase in Hemoglobin Adsorption and Heme Accumulation by Porphyromonas gingivalis" pages 21225-21231. Whole document	1-17

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

14

Applicant's or agent's file reference 22692442/EJH/aal	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. PCT/AU00/00599	International Filing Date (day/month/year) 26 May 2000	Priority Date (day/month/year) 28 May 1999
International Patent Classification (IPC) or national classification and IPC Int. Cl. ⁷ A61K 38/41, 38/42, 38/17, 39/40; A61P 31/04, 15/02		
Applicant THE UNIVERSITY OF SYDNEY et al.		

1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of 4 sheets, including this cover sheet. <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of 1 sheet(s).
3.	This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 22 November 2000	Date of completion of the report 14 March 2001
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer S. CHEW Telephone No. (02) 6283 2248

I. Basis of the report

1. With regard to the elements of the international application:*
- ☐ the international application as originally filed.
- ☒ the description, pages **1-55**, as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☒ the claims, pages **57-59**, as originally filed,
pages , as amended (together with any statement) under Article 19,
pages , filed with the demand,
pages **56**, received on **5 March 2001** with the letter of **1 March 2001**
- ☒ the drawings, pages **1/35 - 35/35**, as originally filed,
pages , filed with the demand,
pages , received on with the letter of
- ☒ the sequence listing part of the description:
pages **1-5**, as originally filed
pages , filed with the demand
pages , received on with the letter of
2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language which is:
- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, was on the basis of the sequence listing:
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished
4. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.
5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims 1-17	YES
	Claims	NO
Inventive step (IS)	Claims 1-17	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-17	YES
	Claims	NO

2. Citations and explanations (Rule 70.7)**NOVELTY (N) and INVENTIVE STEP (IS): Claims 1-17**

The present invention relates to a method for the prophylaxis and treatment of infection by microorganisms in biological environments from where the microorganisms acquire iron, heme or porphyrin. The method involves antagonising the interaction between a microbial-derived molecule having a HA2 domain and an HA2-binding motif on a porphyrin containing molecule present in said biological environments. The present invention further provides agents capable of antagonising the interaction between the HA2 containing molecule and the HA2-binding motif on a porphyrin containing molecule.

None of the documents listed in the ISR disclose or obviously suggest the features of the claimed invention. Therefore claims 1-17 are novel and have an inventive step.

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of Box I

Rule 67 lists the subject matter which under Article 34(4)(a)(i) an international preliminary examination is not required to be carried out. At item (iv) it specifies methods for treatment of the human or animal body by surgery or therapy, as well as diagnostic methods, as such matter. However the agreement between WIPO and Australia further qualifies this by excepting from exclusion any subject matter which is examined under national grant procedures. Claims 1-11 have nonetheless been considered because the identified subject matter does not contravene Australian law.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US97/04635

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : A61K 39/02

US CL : 424/234.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 424/234.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Genbank: geneseq, pir50, swiss-prot34; APS; Dialog

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PIKE, R. et al, Lysine- and Arginine-specific Proteinases from <i>Porphyromonas gingivalis</i> . The Journal of Biological Chemistry. 04 January 1994. Vol. 269. No. 1. pages 406-411, especially 409-410.	1-8
Y	PAVLOFF, N. et al. Molecular Cloning and Structural Characterization of the Arg-gingipain Proteinase of <i>Porphyromonas gingivalis</i> . The Journal of Biological Chemistry, 20 January 1995. Vol. 270. No. 3. pages 1007-1010, especially pages 1008-1009.	1-8
X	FLETCHER, H.M. et al. Cloning and Characterization of a New Protease Gene (prth) from <i>Porphyromonas gingivalis</i> . Infection and Immunity, October 1994. Vol. 62. No. 10. pages 4279-4286, especially 4280-4281.	1-8

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	* T	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
* A* document defining the general state of the art which is not considered to be of particular relevance	* X	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
* E* earlier document published on or after the international filing date	* Y	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
* L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reasons (as specified)	* A*	document member of the same patent family
* O* documents referring to an oral disclosure, use, exhibition or other means		
* P* document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

20 MAY 1997

Date of mailing of the international search report

10 JUN 1997

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

GINNY PORTNER

Telephone No. (703) 308-0196

Form PCT/ISA/210 (second sheet)(July 1992)*

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US97/04635

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	OKAMOTA. K et al. Structural Characterization of Argingipain, a Novel Arginine-Specific Cysteine Proteinase as a Major Periodontal Pathogenic Factor from Porphyromonas gingivalis. Archives of Biochemistry, 01 February 1995. vol. 316. No. 2. pages 917-925, especially pages 918 and 924.	1-8
X	US 5,475,097 A (TRAVIS et al.) 12 December 1995, see whole document.	1-8
X	WO 95/11298 A (UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC.) 27 April 1995, see whole document, especially abstract.	1-8
X	WO 95/07286 A (UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC.) 16 March 1995, see whole document, especially abstract.	1-8
X,P	WO 96/17936 A (UNIVERSITY OF FLORIDA) 13 June 1996, see whole document, especially abstract.	1-8

Form PCT/ISA/210 (continuation of second sheet)(July 1992)*

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(19) World Intellectual Property Organization
International Bureau



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PCT

(10) International Publication Number
WO 00/72875 A1

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38/42, 38/17, 38/10, 39/40, A61P 31/04, 15/02

(74) Agents: HUGHES, E., John, L. et al.; Davies Collison
Cave, Level 3, 303 Coronation Drive, Milton, QLD 4064
(AU).

(21) International Application Number: PCT/AU00/00599

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PQ 0652 28 May 1999 (28.05.1999) AU

(71) Applicant (*for all designated States except US*): UNIVER-
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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE,
DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
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(84) Designated States (*regional*): ARIPO patent (GH, GM,
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patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): COLLYER,
Charles, Andrew [GB/AU]; 195 St John's Road, Glebe,
NSW 2037 (AU). HUNTER, Neil [AU/AU]; 6 Clement
Close, Pennant Hills, NSW 2120 (AU). DE CARLO,
Arthur, Anthony, Jr. [US/US]; 3020 Woodhaven Circle,
Birmingham, AL 35243 (US).

Published:

— With international search report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A METHOD OF PROPHYLAXIS AND TREATMENT AND AGENTS USEFUL FOR SAME

WO 00/72875 A1

(57) Abstract: The present invention relates generally to a method for the prophylaxis and treatment of infection by microorganisms in biological environments from where the microorganisms acquire iron, heme or porphyrin, generally but not exclusively for growth. Particular biological environments contemplated by the present invention include but are not limited to vascular regions and cavities as well as mucosal membranes in animals including mammals, reptiles, amphibians and fish and in avian species as well as hooves of livestock animals. The method of the present invention involves interrupting, reducing or otherwise antagonizing the interaction between a microbial-derived polypeptide, such as but not limited to a polypeptide having cysteine proteinase activity, and a porphyrin-containing molecule in such as heme. The present invention further provides agents useful in the prophylaxis and treatment of microbial infection of biological environments such as vascular regions and cavities including mucosal membranes as well as hooves involving microbial acquisition of iron, heme or porphyrin. Such agents are particularly useful as components in therapeutic compositions. Particularly important microbial infections targeted by the present invention involve infections in the oral cavity, nasopharynx, oropharynx, vagina and urethra in mammals such as humans. Other important microbial infections including infections of hooves in livestock animals such as sheep, cattle and goats.

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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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REPLACED BY
ART 34 ANDT

CLAIMS

1. A method for the prophylaxis or treatment of infection by a microorganism in a biological environment from where the microorganism acquires iron, heme or porphyrin said method comprising administering to said environment an effective amount of an agent for a time and under conditions sufficient to antagonize the interaction between a molecule derived from said microorganism and having an HA2 domain and an HA2-binding motif on a porphyrin containing molecule present in said biological environment.
2. A method according to Claim 1 wherein the microorganism is *Porphyromonas gingivalis* or a related microorganism.
3. A method according to Claim 3 wherein the biological environment is a mammal or reptile or insect or bird or species of fish.
4. A method according to Claim 3 wherein the mammal is a primate, human, livestock animal or a companion animal.
5. A method according to any one of Claims 1 to 4 when used for the treatment of a disease condition in the oral cavity, nasopharynx, oropharynx, vagina or urethra or other vascular or mucosal regions or cavities or in the hooves of livestock animals.
6. A method according to any one of Claims 1 to 5 wherein the HA2-containing molecule is a gingipain, an hagA gene product or a TonB-dependent protein such as but not limited to Tla protein or a homologue thereof.
7. A method according to Claim 1 or 6 wherein the porphyrin moiety is heme.
8. A method according to Claim 7 wherein the HA2-binding motif comprises a region comprising or within substructure (Ic) of structure (I):

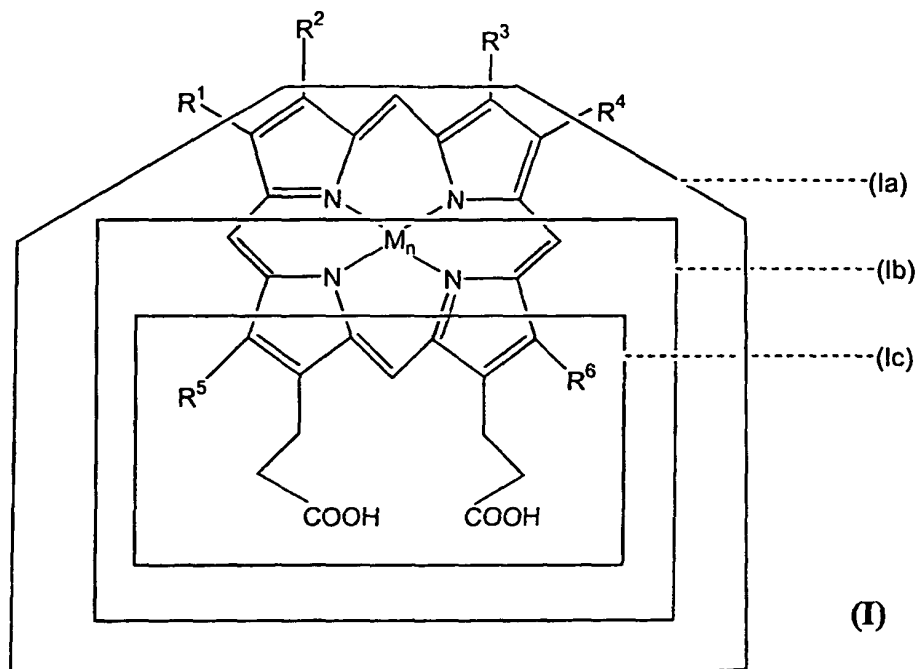
- 56 -

ART 34 AMDT

CLAIMS

1. A method for the prophylaxis or treatment of infection by a microorganism in a biological environment from where the microorganism acquires iron, heme or porphyrin said method comprising administering to said environment an effective amount of an agent for a time and under conditions sufficient to antagonize the interaction between a molecule derived from said microorganism and having an HA2 domain and an HA2-binding motif on a porphyrin containing molecule present in said biological environment.
2. A method according to Claim 1 wherein the microorganism is *Porphyromonas gingivalis* or a related microorganism.
3. A method according to Claim 1 wherein the biological environment is a mammal or reptile or insect or bird or species of fish.
4. A method according to Claim 3 wherein the mammal is a primate, human, livestock animal or a companion animal.
5. A method according to any one of Claims 1 to 4 when used for the treatment of a disease condition in the oral cavity, nasopharynx, oropharynx, vagina or urethra or other vascular or mucosal regions or cavities or in the hooves of livestock animals.
6. A method according to any one of Claims 1 to 5 wherein the HA2-containing molecule is a gingipain, an hagA gene product or a TonB-dependent protein such as but not limited to Tla protein or a homologue thereof.
7. A method according to Claim 1 or 6 wherein the porphyrin moiety is heme.
8. A method according to Claim 7 wherein the HA2-binding motif comprises a region comprising or within substructure (Ic) of structure (I):

- 57 -



wherein R_1 and R_6 are the same or different and each is an alkyl such as a methyl, ethyl or propyl group, or hydrogen, hydroxyl, carboxyl, aldehyde, acetaldehyde or keto group, M is a metal ion in various oxidation states such as but not limited to Fe , Fe^{++} and Fe^{+++} and is optionally present such that n is 0 or 1 or a structurally or functional homologue thereof.

9. A method for the prophylaxis or treatment of infection by a microorganism in a mammal, said microorganism substantially requiring exogenous iron, heme or porphyrin for growth or maintenance wherein said method comprises administering to said mammal an effective amount of an agent for a time and under conditions sufficient to antagonize the interaction between a molecule derived from said microorganism and having an HA2 domain and an HA2-binding moiety on a porphyrin-containing molecule such as but not limited to hemoglobin or a precursor form thereof or part thereof such as heme and wherein said HA2 domain comprises:

- (i) an amino acid sequence substantially encoded by the nucleotide sequence set forth in <400>5 or a nucleotide sequence having at least about 40% similarity thereto or capable of hybridizing thereto under low stringency conditions; and/or

- 58 -

- (ii) an amino acid sequence substantially as set forth in <400>6 or an amino acid sequence having at least about 40% similarity thereto or at least about 20% identity after optimum alignment with same sequence.;

wherein said amino acid sequence is capable of interacting with an HA2-binding moiety on a porphyrin-containing molecule such as but not limited to hemoglobin or a precursor form thereof or part thereof such as heme.

10. A method for prophylaxis or treatment of periodontal, pulmonary, vaginal, urethral or hoof disease resulting from infection by *P. gingivalis* or related microorganism in a mammal said method comprising administering to said mammal an effective amount of a agent for a time and under conditions sufficient to antagonize the interaction between a *P. gingivalis*-derived molecule having an HA2 domain and an HA2-binding motif on hemoglobin.

11. A method for the prophylaxis or treatment of *P. gingivalis* infection or infection by a related microorganism in a mammal, said method comprising administering to said mammal an effective amount of an agent for a time and under conditions sufficient to antagonize the interaction between a *P. gingivalis*-derived HA2- containing molecule comprising the amino acid sequence ALNPPNYLISKDVTG <400>1 or ALNPDNYLISKDVTGATKVKY <400>8 or an amino acid sequence having at least 40% similarity to <400>1 or <400>8 or at least about 20% identity after optimum alignment with same sequence or an amino acid sequence encoded by the nucleotide sequence <400>7 or a nucleotide sequence having at least 40% similarity thereto or a nucleotide sequence capable of hybridizing thereto under low stringency conditions and an HA2-binding motif comprising and including propionic acid groups or anionic or salt forms thereof such as but not limited to the region defined by substructure (Ic) in Formula (I) on a porphyrin-containing molecule such as but not limited to hemoglobin or a precursor form thereof or part thereof such as heme.

12. An agent capable of antagonizing interaction between an HA2-containing molecule and an HA2-binding motif on a porphyrin-containing molecule such as but not limited

- 59 -

to hemoglobin or a precursor form thereof or part thereof such as heme.

13. An agent according to Claim 12 wherein the porphyrin is heme.
14. An agent according to Claim 12 or 13 wherein said agent comprises propionic groups in planar alignment with respect to the molecular structure of said agent.
15. Use of a gingipain or an HA2 domain containing part thereof or an HA2-containing molecule in the manufacture of a medicament for the prevention or treatment of *P. gingivalis* infection or infection by a related microorganism.
16. Use of an antagonist of *P. gingivalis*-derived HA2-containing molecule interaction with a porphyrin-containing molecule such as but not limited to hemoglobin or a precursor form thereof or part thereof such as heme in the manufacture of a medicament for the prophylaxis or treatment of *P. gingivalis* infection or infection by a related microorganism.
17. A therapeutic composition comprising an agent according to any one of Claims 12 to 14 and one or more pharmaceutically acceptable carriers and/or diluents.

5884
ADD
A5

Connecting via Winsock to Dialog

Logging in to Dialog

Trying 31060000009999...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

ENTER PASSWORD:

Welcome to DIALOG

Dialog level 02.16.02D

Last logoff: 26jun03 16:15:23

Logon file405 27jun03 07:46:21

*** ANNOUNCEMENT ***

--File 581 - The 2003 annual reload of Population Demographics is complete. Please see Help News581 for details.

--File 156 - The 2003 annual reload of ToxFile is complete. Please see HELP NEWS156 for details.

--File 990 - NewsRoom now contains February 2003 to current records.
File 992 - NewsRoom 2003 archive has been newly created and contains records from January 2003. The oldest months's records roll out of File 990 and into File 992 on the first weekend of each month.
To search all 2003 records BEGIN 990, 992, or B NEWS2003, a new OneSearch category.

--Connect Time joins DialUnits as pricing options on Dialog.
See HELP CONNECT for information.

--CLAIMS/US Patents (Files 340,341, 942) have been enhanced with both application and grant publication level in a single record. See HELP NEWS 340 for information.

--SourceOne patents are now delivered to your email inbox as PDF replacing TIFF delivery. See HELP SOURCE1 for more information.

--Important news for public and academic libraries. See HELP LIBRARY for more information.

--Important Notice to Freelance Authors--
See HELP FREELANCE for more information

NEW FILES RELEASED

***World News Connection (File 985)

***Dialog NewsRoom - 2003 Archive (File 992)

***TRADEMARKSCAN-Czech Republic (File 680)

***TRADEMARKSCAN-Hungary (File 681)

***TRADEMARKSCAN-Poland (File 682)

UPDATING RESUMED

RELOADED

***Population Demographics -(File 581)

***CLAIMS Citation (Files 220-222)

REMOVED

***U.S. Patents Fulltext 1980-1989 (File 653)

>>> Enter BEGIN HOMEBASE for Dialog Announcements <<<

>>> of new databases, price changes, etc. <<<

* * * * See HELP NEWS 225 for information on new search prefixes
and display codes

SYSTEM:HOME

Cost is in DialUnits

Menu System II: D2 version 1.7.9 term=ASCII

*** DIALOG HOMEBASE(SM) Main Menu ***

Information:

1. Announcements (new files, reloads, etc.)
2. Database, Rates, & Command Descriptions
3. Help in Choosing Databases for Your Topic
4. Customer Services (telephone assistance, training, seminars, etc.)
5. Product Descriptions

Connections:

6. DIALOG(R) Document Delivery
7. Data Star(R)

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/H = Help /L = Logoff /NOMENU = Command Mode

Enter an option number to view information or to connect to an online
service. Enter a BEGIN command plus a file number to search a database
(e.g., B1 for ERIC).

? b 410

27jun03 07:46:21 User268147 Session D90.1

\$0.00 0.149 DialUnits FileHomeBase

\$0.00 Estimated cost FileHomeBase

\$0.00 Estimated cost this search

\$0.00 Estimated total session cost 0.149 DialUnits

File 410:Chronolog(R) 1981-2003/Aug

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Set Items Description

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HILIGHT set on as "

HILIGHT set on as "

? b 5, 34, 155, 172

27jun03 07:46:28 User268147 Session D90.2

\$0.00 0.070 DialUnits File410

\$0.00 Estimated cost File410

\$0.01 TELNET

\$0.01 Estimated cost this search

\$0.01 Estimated total session cost 0.218 DialUnits

SYSTEM:OS - DIALOG OneSearch

File 5:Biosis Previews(R) 1969-2003/Jun W4

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File 34:SciSearch(R) Cited Ref Sci 1990-2003/Jun W4

(c) 2003 Inst for Sci Info

File 155:MEDLINE(R) 1966-2003/Jun W4

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*File 155: Medline has been reloaded and accession numbers have changed. Please see HELP NEWS 155.

File 172:EMBASE Alert 2003/Jun W4

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Set Items Description

? e au=collyer charles

Ref Items Index-term

E1	19	AU=COLLYER CA
E2	2	AU=COLLYER CE
E3	6	*AU=COLLYER CHARLES
E4	11	AU=COLLYER CHARLES A
E5	2	AU=COLLYER CHARLES E
E6	7	AU=COLLYER D
E7	1	AU=COLLYER D M
E8	1	AU=COLLYER D N
E9	2	AU=COLLYER DEAN
E10	1	AU=COLLYER DR
E11	19	AU=COLLYER E
E12	4	AU=COLLYER F

Enter P or PAGE for more

? s e1 or e3 or e4

	19	AU=COLLYER CA
	6	AU=COLLYER CHARLES
	11	AU=COLLYER CHARLES A
S1	36	AU='COLLYER CA' OR AU='COLLYER CHARLES' OR AU='COLLYER CHARLES A'

? e au=hunter neil

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E2	21	AU=HUNTER NANCY R
E3	33	*AU=HUNTER NEIL
E4	4	AU=HUNTER NEZAHAT
E5	5	AU=HUNTER NF
E6	1	AU=HUNTER NICHOLA
E7	1	AU=HUNTER NICHOLE
E8	1	AU=HUNTER NICOLA S
E9	2	AU=HUNTER NJ
E10	30	AU=HUNTER NORA
E11	1	AU=HUNTER NORMAN R
E12	1	AU=HUNTER NORWOOD

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	33	AU=HUNTER NEIL
	5	AU=HUNTER NF
	2	AU=HUNTER NJ
S2	40	AU='HUNTER NEIL' OR AU='HUNTER NF' OR AU='HUNTER NJ'

? e au=hunter

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E3	18	*AU=HUNTER
E4	425	AU=HUNTER A
E5	2	AU=HUNTER A A
E6	5	AU=HUNTER A B
E7	1	AU=HUNTER A B B W-S
E8	20	AU=HUNTER A C
E9	18	AU=HUNTER A CHRISTY
E10	7	AU=HUNTER A D
E11	1	AU=HUNTER A D L
E12	1	AU=HUNTER A D W

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S3 18 AU='HUNTER'

? e au=hunter n

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E1	2	AU=HUNTER MYRA
E2	8	AU=HUNTER MYRA S
E3	606	*AU=HUNTER N
E4	1	AU=HUNTER N A
E5	3	AU=HUNTER N B
E6	4	AU=HUNTER N D
E7	13	AU=HUNTER N J
E8	1	AU=HUNTER N L
E9	7	AU=HUNTER N M
E10	2	AU=HUNTER N P
E11	2	AU=HUNTER N P A
E12	113	AU=HUNTER N R

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S4 606 AU='HUNTER N'

? e au=decarlo

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E4	12	AU=DECARLO A
E5	13	AU=DECARLO A A
E6	1	AU=DECARLO A A JR
E7	1	AU=DECARLO A F
E8	8	AU=DECARLO A F JR
E9	1	AU=DECARLO A J
E10	1	AU=DECARLO A.
E11	1	AU=DECARLO A.A.
E12	14	AU=DECARLO AA

Enter P or PAGE for more

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Ref	Items	Index-term
E13	1	AU=DECARLO AJ
E14	2	AU=DECARLO ALFRED F
E15	5	AU=DECARLO ALFRED F JR
E16	1	AU=DECARLO ANTHONY
E17	1	AU=DECARLO ARNOLD V
E18	2	AU=DECARLO ARTHUR

E19 7 AU=DECARLO ARTHUR A
 E20 12 AU=DECARLO D
 E21 3 AU=DECARLO D K
 E22 1 AU=DECARLO D M
 E23 1 AU=DECARLO D P
 E24 1 AU=DECARLO D.K.

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12 AU=DECARLO A
 13 AU=DECARLO A A
 1 AU=DECARLO A A JR
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 1 AU=DECARLO A.A.
 14 AU=DECARLO AA
 1 AU=DECARLO ANTHONY
 2 AU=DECARLO ARTHUR
 7 AU=DECARLO ARTHUR A
 S5 52 AU='DECARLO A' OR AU='DECARLO A A' OR AU='DECARLO A A JR'
 OR AU='DECARLO A.' OR AU='DECARLO A.A.' OR AU='DECARLO
 AA' OR AU='DECARLO ANTHONY' OR AU='DECARLO ARTHUR' OR
 AU='DECARLO ARTHUR A'

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Set Items Description

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 S2 40 AU='HUNTER NEIL' OR AU='HUNTER NF' OR AU='HUNTER NJ'
 S3 18 AU='HUNTER'
 S4 606 AU='HUNTER N'
 S5 52 AU='DECARLO A' OR AU='DECARLO A A' OR AU='DECARLO A A JR' -
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 AU='DECARLO ANTHONY' OR AU='DECARLO ARTHUR' OR AU='DECARLO AR-
 THUR A'

? s s1 or s2 or s3 or s4 or s5

36 S1
 40 S2
 18 S3
 606 S4
 52 S5

S6 728 S1 OR S2 OR S3 OR S4 OR S5

? s hemoglobin? or heme? or hemin? or

>>>Possible typing error near end of command

? s hemoglobin? or heme? or hemin?

174693 HEMOGLOBIN?
 68907 HEME?
 9799 HEMIN?

S7 240261 HEMOGLOBIN? OR HEME? OR HEMIN?

? s s6 and s7

728 S6

240261 S7

S8 16 S6 AND S7

? s gingivalis and s6

10837 GINGIVALIS
 728 S6

S9 49 GINGIVALIS AND S6

? s ha2 or ha-2 or "ha 2"

889 HA2
 9 HA-2
 0 HA 2

S10 898 HA2 OR HA-2 OR "HA 2"

? s s10 and s6

898 S10
 728 S6
 S11 12 S10 AND S6
 ? s gingipain?
 S12 505 GINGIPAIN?
 ? s s12 and s6
 505 S12
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 S13 18 S12 AND S6
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Set	Items	Description
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S5	52	AU='DECARLO A' OR AU='DECARLO A A' OR AU='DECARLO A A JR' - OR AU='DECARLO A.' OR AU='DECARLO A.A.' OR AU='DECARLO AA' OR AU='DECARLO ANTHONY' OR AU='DECARLO ARTHUR' OR AU='DECARLO ARTHUR A'
S6	728	S1 OR S2 OR S3 OR S4 OR S5
S7	240261	HEMOGLOBIN? OR HEME? OR HEMIN?
S8	16	S6 AND S7
S9	49	GINGIVALIS AND S6
S10	898	HA2 OR HA-2 OR "HA 2"
S11	12	S10 AND S6
S12	505	GINGIPAIN?
S13	18	S12 AND S6
? s s8 or s9 or s11 or s13		
	16	S8
	49	S9
	12	S11
	18	S13
S14	53	S8 OR S9 OR S11 OR S13
? s py<=1999		
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	53	S14
	31283370	S15
S16	34	S14 AND S15
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16/9/1 (Item 1 from file: 5)
 DIALOG(R)File 5:Biosis Previews(R)
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12105864 BIOSIS NO.: 199900400713

Modification of macrophage and neutrophil responses to bacteria by IgA antibodies.

AUTHOR: Sibley D A(a); Hedges S(a); DeCarlo A(a); Thon V(a); Katz J (a); Russell M W(a)

AUTHOR ADDRESS: (a)University of Alabama at Birmingham, Birmingham, AL**USA

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LANGUAGE: English

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Set	Items	Description
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S2	40	AU='HUNTER NEIL' OR AU='HUNTER NF' OR AU='HUNTER NJ'
S3	18	AU='HUNTER'
S4	606	AU='HUNTER N'
S5	52	AU='DECARLO A' OR AU='DECARLO A A' OR AU='DECARLO A A JR' - OR AU='DECARLO A.' OR AU='DECARLO A.A.' OR AU='DECARLO AA' OR AU='DECARLO ANTHONY' OR AU='DECARLO ARTHUR' OR AU='DECARLO AR- THUR A'
S6	728	S1 OR S2 OR S3 OR S4 OR S5
S7	240261	HEMOGLOBIN? OR HEME? OR HEMIN?
S8	16	S6 AND S7
S9	49	GINGIVALIS AND S6
S10	898	HA2 OR HA-2 OR "HA 2"
S11	12	S10 AND S6
S12	505	GINGIPAIN?
S13	18	S12 AND S6
S14	53	S8 OR S9 OR S11 OR S13
S15	31283370	PY<=1999
S16	34	S14 AND S15